The Lithium Force e-Bus

The world’s most advance electric bus system
About Lithium Force

- Registered in Hong Kong
- Purchased a variety of EV-related businesses & technology including battery pack design and build facilities, recharging expertise and V2G laboratory
- Venture-backed by Chinese and Israeli VC
- Run by professionals drawing out the best of East & West
- Committed to world-class quality of products and service
50 fully electric buses deployed in the Olympic village to transport athletes and Olympic Personnel
50 Olympic buses fully integrated into the city bus fleet
Swappable battery packs

Each bus fitted with ten interchangeable battery packs; buses can travel 130-150km per charge (depending on aircon usage)
Six minute battery exchange

Buses pull into swap station and 2 robots exchange spent batteries with full ones in less than six minutes
Batteries can be recharged at night.

Night time electricity is abundant and cheap – recharging at night allows for increased power grid optimisation.
Battery packs fully optimized

Entire set of battery packs optimised by sophisticated recharging software to enhance cell lifetime
Manual battery swap available

Near-zero down time in case of battery failure – fast manual battery interchange available at roadside
Cost/Benefit

- £140,000: e-Bus extra cost (compared to diesel) (including recharging infrastructure; excluding land for recharging station)
- £35,000: annual fuel and servicing costs for diesel circa (assuming 200 miles a day, 64p/litre, 1.5m/litre)
- £2,000: Annual e-Bus operational costs
- Zero emissions = unquantifiable huge benefit
- Costs are fixed (do not fluctuate with oil prices)
Packs fit underneath the bus and at the rear adding stability and giving easy access.
Buses are deployed in a full operational real-life transit system. This turnkey solution can be rolled out in cities across the world.
E-Bus advantages over trams/trolley buses

- Much lower infrastructure costs
- No ugly/dangerous overhead wires
- Much lower vehicle costs
- Can use night-time electricity
- Can be deployed anywhere in the city, any time
A 100% Zero Emission bus fleet for small to medium size cities
- Fast implementation, no planning permission required
- Use excess night-time electricity (renewables such as wind, where available)
- Integration with the power grid for peak support
- Technology adaptable for use in city vehicles fleets such as waste collection

Potential....
Recap: benefits of battery swap

1. Unlimited range
2. Night time recharge
3. Battery optimisation for longer life
4. Near-zero down time